

SAF Throttling

SAF Throttling feature is implemented and used to ensure that all the devices should not attempt to send all SAF transactions immediately upon renewal of connectivity to the host.

Devices will be in SAF mode when there is a connection outage with customer network. Once the connectivity is restored, all the devices will be online and start posting all the SAF transactions at the same time, and this could make the host overloaded.

Therefore, this feature is implemented in Engage devices, to ensure that the terminal will wait for a different amount of time period before starting to post the transactions. The waiting time period for each terminal will be calculated from the serial number of the terminal. So that all devices wait for a different amount of time, and then the host will not be loaded with huge number of connection request at the same time.

SAF throttling feature can be enabled by setting SAFTHROTTLINGENABLE parameter. This parameter is used to enable or disable SAF throttling feature (throttling mechanism) in SCA. The default value is 0. SAFTHROTTLINGINTERVAL parameter is also added to calculate the actual throttling interval by finding the modulus of device serial number. The parameter value is used as denominator. The default value is 300.

Refer to Store and Forward parameter table in SCA Engage Configuration Guide for more details on SAFTHROTTLINGENABLE and SAFTHROTTLINGINTERVAL configuration parameters.

Actual SAF throttling interval (in seconds) = (Device Serial Number) % SAFTHROTTLINGINTERVAL

Example

Serial number of the device is 169-000-278 and SAFTHROTTLINGINTERVAL=300, then throttling interval would be $169000278 \% 300 = 26$.

This particular device will post the SAF record at 26th second, after it detects the host connectivity is renewed and the application will check the file every "SAFPOSTINTERVAL" after that.